

Work Order ID 86705

86705

Page 1

July-06-12 11:37:37 AM

Item ID: D206-642-241

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

Start Date: 7/06/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2650	Rev F

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-241

CHG005

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86705***86705***

Page 2

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Stop ***NS2***

Item Name: Replacement Skidtube

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00

110

Skidtubes

0.00

Skidtubes

Memo

1-Deburr Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty Part Number DescriptionBatch

A/R Aluminum Rod *M122324/M122130*

4-Grind weld flush to cap on top surface only.

5-Cut Aft end as per dwg 2650 from front of tube and Deburr

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650

7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt 8167.

9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.

*CF 12-7-26**SAD 12-08-03*

W/O:		WORK ORDER CHANGES					
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Page 3

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D2650

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D2650

15-C'sink GHW rivet holes as per Dwg D2650

SAD 1d-08-03

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS 16 12/06/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 4

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Required Date: 8/10/12 Req'd Qty: 1.00

1

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open crossbolt holes to Ø0.3125"								
	2-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650. Open Aft cap hole #6.								
	3-Deburr tube and blow out chips from inside the tube								
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	QC7-Inspect Chemical Conversion Coat	0.00							
150									
QC	Memo	0.00							
Quality Control									

*Move in
seq 110*

SAD 12-08-03

1 76 12-8-07

1 3B 12/08/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 5

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 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 7/06/12 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description:	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Open holes to finished size as per Dwg D2650, D2650-3 Drilling Detail (without cutting fluid)								
	2-C'sink crossbolt spacer holes as per Dwg D2650(without cutting fluid)								
	3-Debur and blow out all chips from inside the tube								
170	QC6- Inspect dimensions to drawing	0.00							
170									
QC	Memo	0.00							
Quality Control									

Handwritten: **BB** 12/08/07

Handwritten: **DAG 16 12/08/07**

Handwritten: **(X)**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 6

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Start Date: 7/06/12 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Skidtubes	0.00							
180									
Skidtubes	Memo	0.00							
Skidtubes	1-Locate, install and rivet doublers as per Dwg D2650. Micro-shave rivets as required								
	2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting								
	Start Date: 8/20 Time: 8:30 12-08-08								
	Finish Date: 12/08/15 Time: 11:00								
	Pick:								
	Qty Part Number Description Batch								
	A/RSikaflex-291 m222130								
	Sikaflex expire date: 13/03/14								
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control									

① SAD 12-08-08

1 8 12/08/15 DAS 18 3-83

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 7

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N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 7/06/12 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

0.00

200

Skidtubes

0.00

Skidtubes

Memo

1-remove alodine from around hole and prepare for welding

BE 12/08/15

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch

A/RAluminum Rod *M122324*

BE 12/08/15

3-Grind welds flush as per Dwg D2650.

BE 12/08/20

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod *NONE*

BE 12/08/23

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D2650. Deburr

> SAD 12-08-23

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 8

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Start Date: 7/06/12 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 8/10/12 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	HandFinishing	0.00							
210	HandFinish	0.00							
Hand Finishing	Install D2680-041 Nut Plate as per Dwg D2650								
220	QC10- Inspect visual per QSI004- ground welds	0.00							
220	Memo	0.00							
QC									
Quality Control									
230	QC5- Inspect part completeness to step on W/O	0.00							
230	Memo	0.00							
QC									
Quality Control									

① 12/08/20

DAS 16 17/08/29

QC9 → DAS 24 12.8.27

DAS 16 17/08/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 9

July-06-12 11:37:37 AM

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 Required Date: 8/10/12 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	Pressure Wash per QSI005 4.3	0.00				1	pb	12-8-27	
240									
HandFinish	Memo	0.00							
Hand Finishing	Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.								
250	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
250									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 12:00 OVEN TEMPERATURE: 320°F FINISH TIME: 12:30								
260	QC3- Inspect Part Finish	0.00							
260									
QC	Memo	0.00							
Quality Control									

IX ✓ M-L 12/08/27
 1x f M 12/09/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 10

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 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 *270* HandFinish Hand Finishing	HandFinishing Memo 1- Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate. A/RSikaflex-291 <u>M1122443</u> Sikaflex expire date: <u>13103</u> 2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive. 3-Install MS27039-4-06 Screw as per DEO 9153. 4 -Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>M1122443</u> Sikaflex expire date: <u>13103</u> 5 -Wing Walk as per Dwg D2650-3 and QSI 005 4.4 A/R Batch: <u>M1122443</u> <u>Batch</u>	0.00 0.00				<u>1x</u>	<u>q</u>	<u>30</u>	<u>11/08/30</u>
300 *300* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							<u>1</u>

SMB
12-8-31

12/09/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 11

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 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
310		0.00							
310	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-664-241								
	Location: _____								
	PPP Rev: _____								
320	QC21- Final Inspection - Work Order Release	0.00							
320									
QC	Memo	0.00							
Quality Control									

7PP 33980

12/8/12 sf

MS 12/09/12

MF
12-09-12

W/O:		WORK ORDER CHANGES					
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Picklist Print

July-06-12 11:37:37 AM

Page 1

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: 04.12.02 Revised procedural steps KJ/JLM IPP RevP: revise and update route/bom DD
10.01.06 verified by: ECIPP rev Q 10.02.19 per PAR 09-043 EC verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620 Skidtube, 206 Skidtube		Manufactured	No			110	Each	31.0000	1	1		CF 12-7-26	

Location	Loc Qty	Loc Code
LG	31	
79543	2	
81365	1	
82517	3	
82518	5	
86331	20	

D3286-1 Doubler		Manufactured	No			110	Each	61.0000	2			SAD 12-08-08	
--------------------	--	--------------	----	--	--	-----	------	---------	---	--	--	--------------	--

Location	Loc Qty	Loc Code
LG002	173	
74872	6	
78014	6	
79556	43	
ST046	-112	
76772	6	

D2647 Cap		Manufactured	No			110	Each	65.0000	1	1		BE 12/07/27	
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Location	Loc Qty	Loc Code
LG002	65	
75482	3	
79563	62	

D2654-3 Web		Manufactured	No			180	Each	4.0000	1	1		SAD 12-08-08	
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Location	Loc Qty	Loc Code
LG	4	
85944	4	

W/O:		WORK ORDER CHANGES					
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July-06-12 11:37:37 AM

Page 2

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Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04

Purchased No

180 Each 3,959.0000 52

Cherry Rivet

520 72-08-08

Location Loc Qty Loc Code

ST331 116

116471 36

117816 3

118686 1

118840 16

119017 60

st510 3843

119075 3843

52

D2649

Manufactured No

200 Each 351.0000 18 18

Cross Bolt Spacer

BE 12/08/15
86912 x 18

Location Loc Qty Loc Code

LG 208

77574 2

79502 8

79503 5

79564 4

79565 7

85586 182

LG001 143

65317 1

68224 2

68507 11

71355 2

72704 2

72841 11

73390 8

73857 21

73858 53

73859 4

73860 4

78020 6

78583 2

79566 16

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Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 3

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

D3286-3 Manufactured No 200 Each 40.0000 2 2 *BE 12/08/23*

Location	Loc Qty	Loc Code
LG	38	
81975	38	
LG001	2	
74117	1	
79557	1	

D2680-041 Manufactured No 210 Each 74.0000 1 1 *12/08/20*

Location	Loc Qty	Loc Code
ST013	74	
78016	74	

CR3212-4-03 Purchased No 210 Each 1,248.0000 2 2 *12/08/20*

Location	Loc Qty	Loc Code
FP002	340	
114859	340	
ST331	908	
110139	2	
119017	906	

CCR264SS3-3 Purchased No 210 Each 320.0000 2 2 *12/08/20*

Location	Loc Qty	Loc Code
ST331	320	
113973	2	
117849	77	
119017	241	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 4

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

D2646 Manufactured No 270 Each 81.0000

Aft Cap

1 21 1 11/08/30

Location	Loc Qty	Loc Code
FP002	81	
62678	5	
68280	5	B85848
70945	1	
71070	2	
73294	1	
73825	2	
79562	4	
81974	28	
85443	33	

x1

D2651-1 Manufactured No 270 Each 474.0000

Plug

18 21 18 11/08/30

Location	Loc Qty	Loc Code
FP	200	
FP001	425	
57869	1	
66445	10	
69018	2	
70827	2	
70839	8	
71037	8	
77559	30	
78584	18	
79234	46	
FP002	203	
85456	203	
FP-A	-354	
77559	1	
78124	5	
81954	36	
82573	104	

x18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 86705

Parent Item: D206-642-241

Start Date: 7/06/12

Required Date: 8/10/12

Parent Item Name: Replacement Skidtube

Start Qty: 1.00

Required Qty: 1.00

AN960JD416

NAS1149D0463J

Purchased

No

270

Each

29.0000

Washer

*

1 M122441 (x1) 21 1108130

Location

Loc Qty

Loc Code

ST351

29

116289

8

119097

21

D2651-3

Manufactured

No

270

Each

1,016.0000

O-Ring

18 18 1108130

Location

Loc Qty

Loc Code

FP001

16

61962

12

73828

4

FP-A

1000

78126

1000

x18

MS27039-1-08

Purchased

No

270

Each

1,168.0000

Screw

46 46 1108130

Location

Loc Qty

Loc Code

ST291

1168

117423

81

119075

1

120308

166

121011

43

121243

500

121708

377

v46

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 6

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

270

Each

1,209.0000

44

44

Insert

Location

Loc Qty

Loc Code

ST280

205

119084

116

120671

89

ST281

44

120807

36

120837

8

ST282

960

121269

960

MS27039-4-06

Purchased

No

270

Each

114.0000

1

1

Screw

Location

Loc Qty

Loc Code

ST292

114

119075

114

AN960JD10L *

NAS1149D0332J

Purchased

No

270

Each

0.0000

46

46

Washer

D3537-1

Manufactured

No

270

Each

124.0000

4

4

Wearpad

Location

Loc Qty

Loc Code

FP002

124

81362

3

83254

1

83255

3

83256

20

85457

49

85458

48

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Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 7

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

D3537-3 Manufactured No 270 Each 30.0000

Wearpad

1 ju 1 12/08/30

Location	Loc Qty	Loc Code
FP002	30	
78836	1	
<u>83327</u>	12	
85481	17	

yi

D3535-13 Manufactured No 270 Each 24.0000

Wearshoe

1 ju 1 12/08/30

Location	Loc Qty	Loc Code
FP001	24	
79850	1	
<u>81353</u>	10	
86229	13	

xi

D3536-13 Manufactured No 270 Each 16.0000

Gasket

1 ju 1 12/08/30

Location	Loc Qty	Loc Code
FP002	16	
<u>81344</u>	16	

xi

D3535-21 Manufactured No 270 Each 20.0000

Wearshoe

1 ju 1 12/08/30

Location	Loc Qty	Loc Code
FP001	19	
80329	6	
86231	13	
FP002	1	
78987	1	

yi

W/O: Dart Aerospace Ltd
DATE
STEP

WORK ORDER CHANGES

PROCEDURE CHANGE						By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 86705

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 1.00

Required Qty: 1.00

D3536-21	Manufactured	No	270	Each	17.0000	1 <u>M</u> 1 <u>12/08/30</u>
Gasket						

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	3	
83433	3	
FP002	14	
<u>78966</u>	14	

D3535-33	Manufactured	No	270	Each	19.0000	1 <u>M</u> 1 <u>12/08/30</u>
Wearshoe						

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	19	
70462	1	
<u>78984</u>	15	
82751	3	

D3536-33	Manufactured	No	270	Each	21.0000	1 <u>M</u> 1 <u>12/08/30</u>
Gasket						

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	21	
<u>81341</u>	12	
86252	9	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 86705

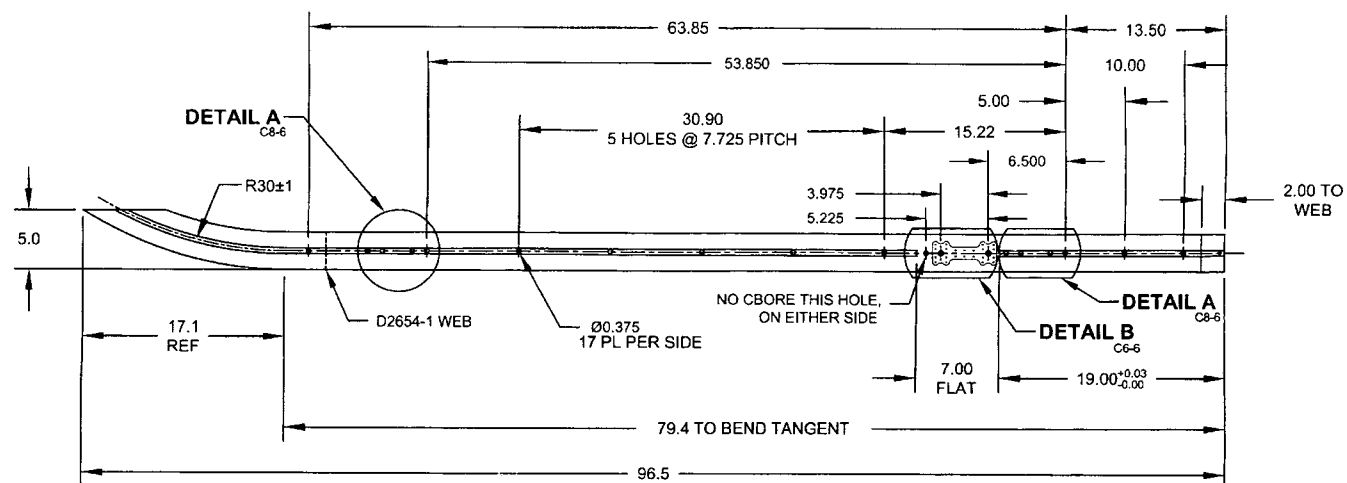
RD12-07-11

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08-07-23

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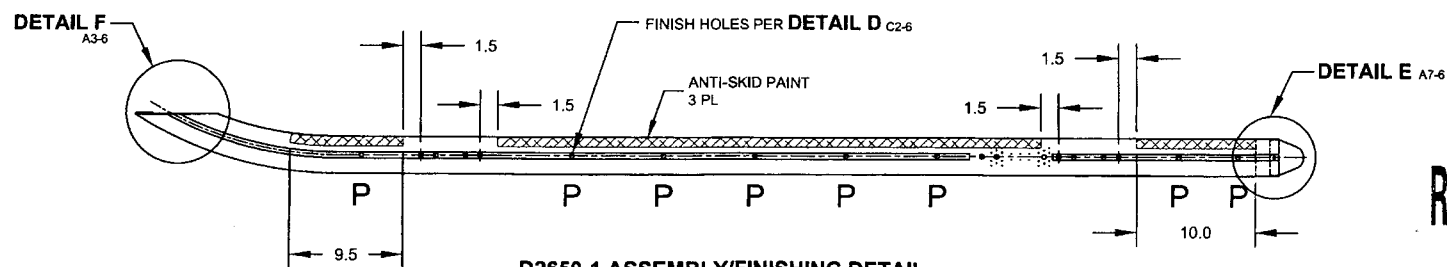
- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL 20.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW: INCCORP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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D2650-1 BENDING/DRILLING DETAIL

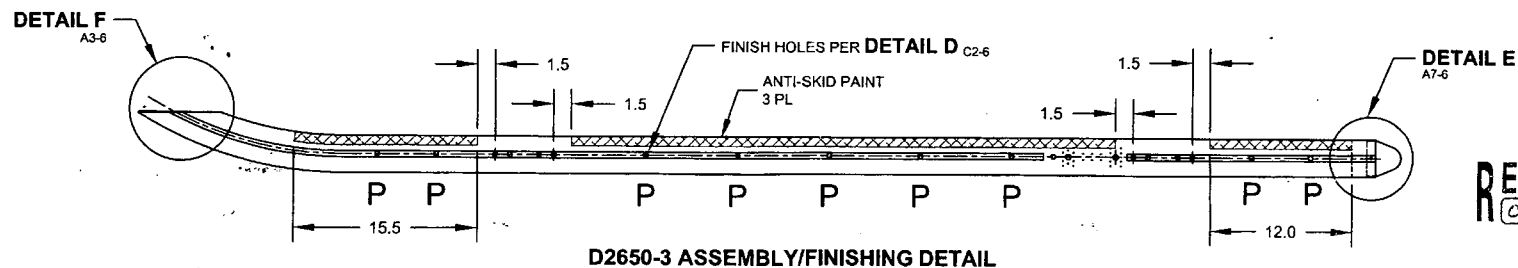
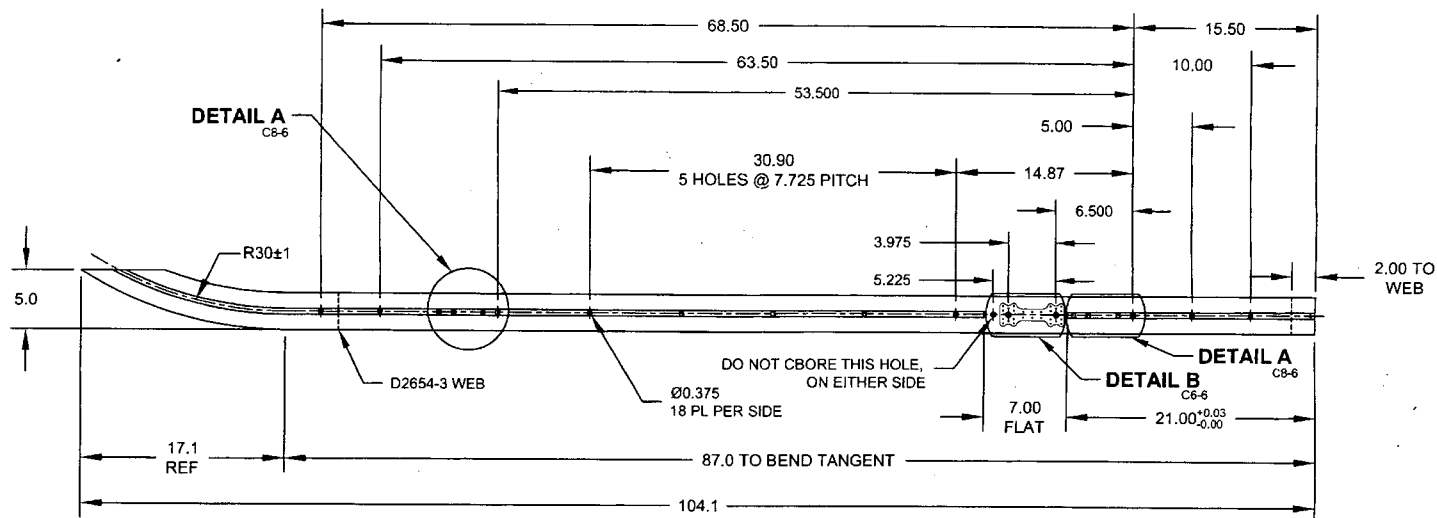
86705



D2650-1 ASSEMBLY/FINISHING DETAIL

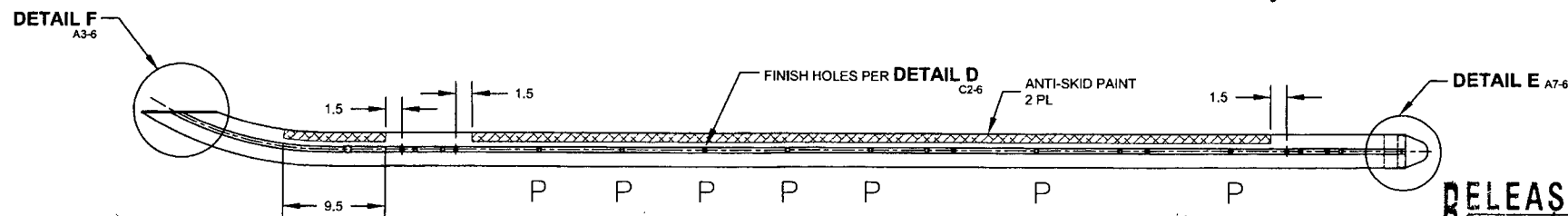
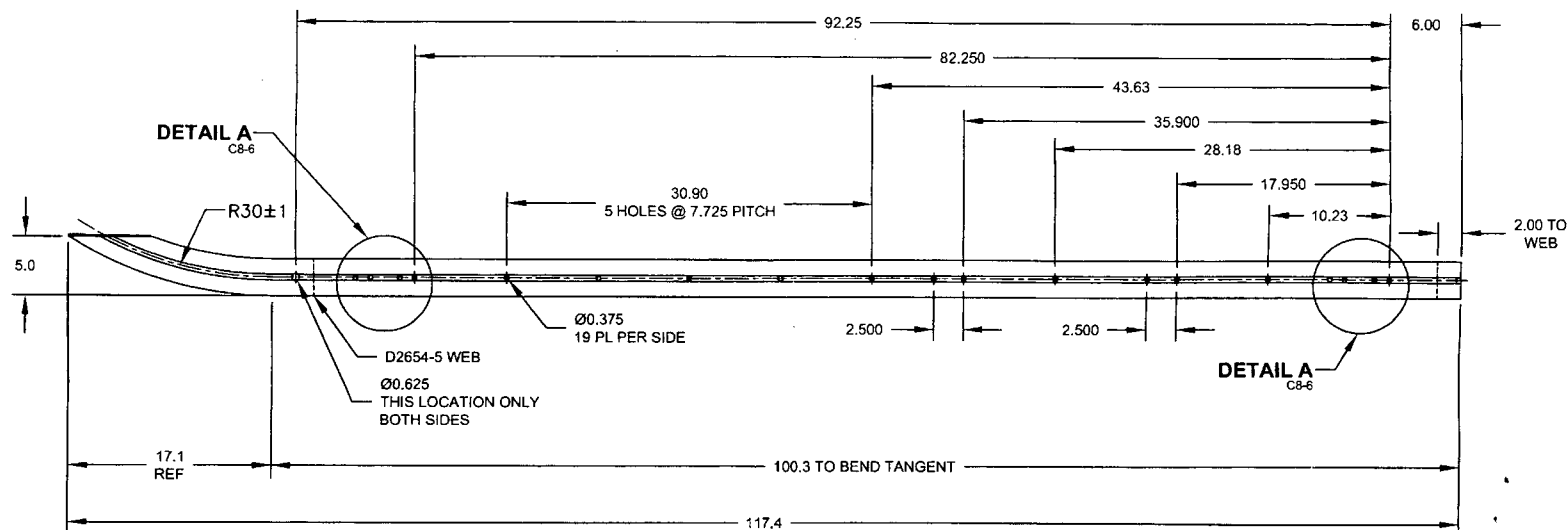
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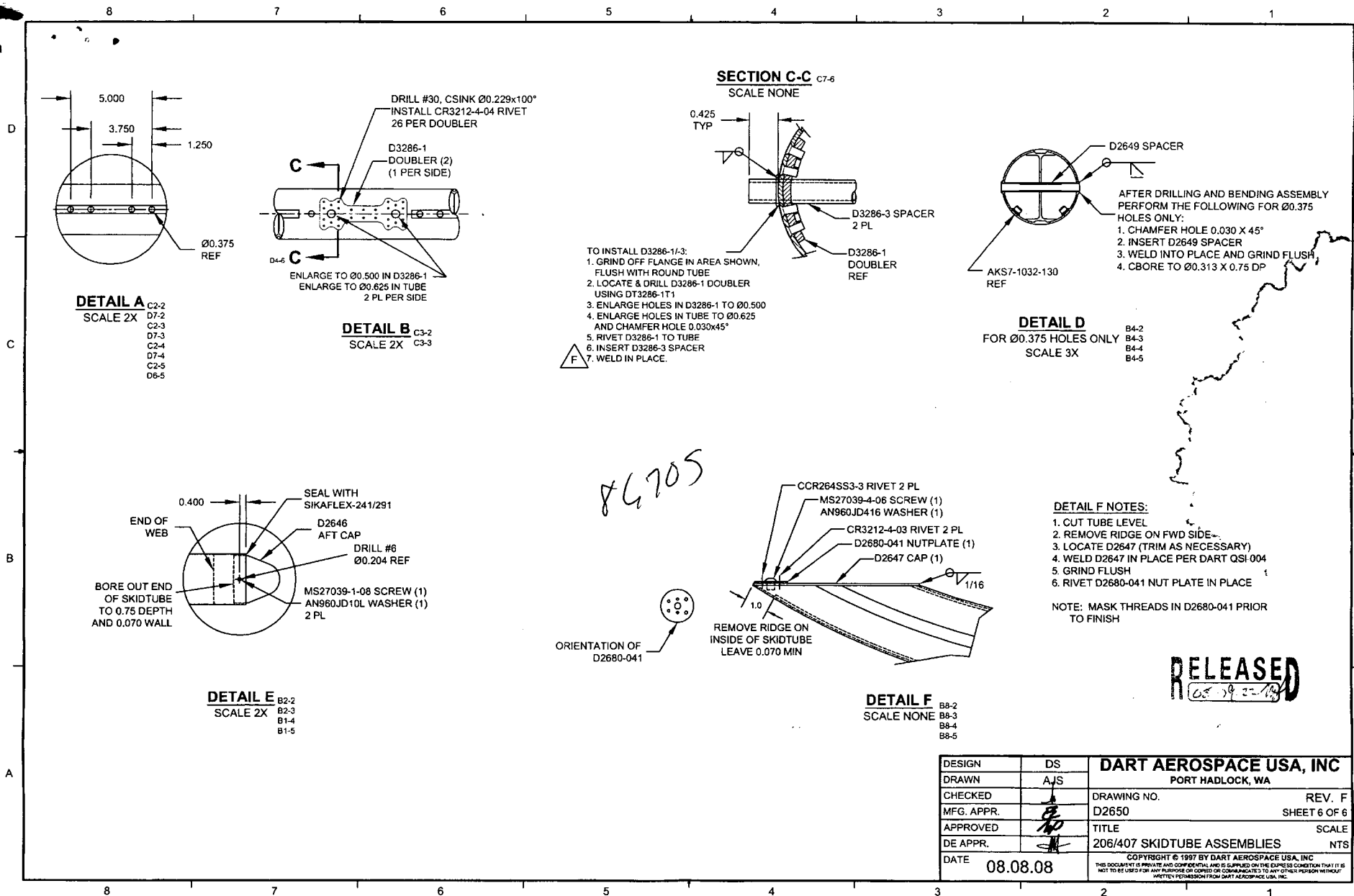
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CHECKED		DRAWING NO.	REV. F
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08.09.22/11/17





NO. 299

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: B85361
Part #: A206-642-541
Description: Skid
Welding Process: Tig[☒] Mig[]
Base material: Alum.
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[<input checked="" type="checkbox"/>]	fail[]
Incomplete Penetration:	pass[<input checked="" type="checkbox"/>]	fail[]
Incomplete Fusion:	pass[<input checked="" type="checkbox"/>]	fail[]
Cracks:	pass[<input checked="" type="checkbox"/>]	fail[]
Overlap (cold lap)	pass[<input checked="" type="checkbox"/>]	fail[]
Undercut:	pass[<input checked="" type="checkbox"/>]	fail[]
Pin holes:	pass[<input checked="" type="checkbox"/>]	fail[]
Porosity (surface):	pass[<input checked="" type="checkbox"/>]	fail[]
Coloration:	pass[<input checked="" type="checkbox"/>]	fail[]
Burn through:	pass[<input checked="" type="checkbox"/>]	fail[]

Qualifier David Jewell Date of Test Coupon 12.07.26
Welder Barclay Elliott Date of Test Coupon 12-07-26

The above named individual is qualified in accordance with AWS D17.1.2001 to weld